BEFORE THE

Federal Communications Commission

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	
Petition of the Intelligent	)	**RM-9096**
Transportation Society of America	)	
for Amendment of the Commission's	)	
Rules To Add Intelligent	)	
Transportation Services (ITS) as a	)	
New Mobile Service With Co-Primary	)	
Status in the 5.850 to 5.925 GHz Band	)	

To: The Commission

REPLY COMMENTS OF THE INTERNATIONAL MUNICIPAL SIGNAL ASSOCIATION

The International Municipal Signal Association ("IMSA"), by its attorneys, and pursuant to the Public Notice released by the Federal Communications Commission ("Commission") on May 28, 1997[1/], respectfully submits these Reply Comments in response to Comments filed by other parties regarding the Petition for Rule Making of the Intelligent Transportation Society of America ("ITS America") to allocate the 5.850-5.925 GHz ("5 GHz") band for the use of Dedicated Short Range Communications ("DSRC") systems in the deployment of a nationwide intelligent transportation systems

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1/ See DA 97-1106, 62 Fed. Reg. 31,099 (June 6, 1997). In an Order released on August 8, 1997 (DA No. 97-1700), the Commission extended the Reply Comment deadline from August 18, 1997 to September 17, 1997.

("ITS") infrastructure. As explained herein, IMSA strongly supports ITS America's Petition and agrees with a number of commenting parties that the requested allocation will serve the public interest. Further, IMSA does not believe that any of the Comments present valid grounds for denying the Petition and thereby frustrating the important goals of the ITS program.

I. INTRODUCTION

IMSA is a non-profit organization dedicated to the development and use of electrical signaling and communications systems in the furtherance of public safety. IMSA members include representatives of federal, state, county, city, township and borough governmental bodies, and representatives of governmental bodies from foreign nations. Organized in 1896, IMSA is the oldest organization in the world dedicated to the activities pertaining to electrical engineering, including the Public Safety use of radio technology.

Many governmental agencies represented by IMSA's membership already have implemented various ITS applications to provide a variety of services that improve the safety and efficiency of transportation on our nation's roadways. For instance, electronic payment services, such as electronic toll collection, have reduced delays in the vicinity of numerous highway toll areas. Moreover, traffic control applications -- some of which

still are being developed and tested -- optimize the flow of traffic on streets and highways through, for example, the manipulation of traffic signals, freeway ramps and reversible lanes. Such congestion management, in turn, reduces energy consumption and vehicle emissions, thereby ameliorating the air pollution problems that plague many areas of this country.

Many of IMSA's members also would be interested in deploying new ITS applications, including the future DSRC-based services identified by ITS America in its Petition.[2/] In this regard, IMSA believes that systems aimed at improving road safety and averting traffic accidents, such as intersection collision warning systems and the Automated Highway System, will provide immeasurable benefits that cannot be attained through existing systems and within the current allocation framework.

II. REPLY COMMENTS

A. The Allocation of the 5 GHz Band for DSRC Services Would Provide Immense Public Interest Benefits, Including an Improvement in Air Quality.

In its Petition, ITS America offered extensive information regarding the vast array of public benefits that will be made available through the allocation of 5 GHz spectrum

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2/ See Petition at 28-30.

for DSRC services.[3/] In expressing support for ITS America's Petition, a number of commenting parties described the particular DSRC applications with which they are involved or interested in developing. For instance, the State of Minnesota explained that the proposed allocation at 5 GHz would facilitate its efforts to implement a statewide ITS architecture essential for reducing traffic congestion.[4/] The Management Systems Council of the American Trucking Association noted that highway bridge engineers would like to implement DSRC systems to transmit communications between bridges and truck suspensions which will enable a truck to change the frequency of its suspension to match that most desirable for the bridge.[5/] Moreover, the United States Department of Transportation ("DOT") identified numerous public safety goals that will be advanced by a new DSRC allocation, including improved emergency and roadway services responsiveness, a reduction in the number of impaired drivers and enhanced vehicle control capability.[6/] Significantly, no commenter has disputed the immense public utility

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[3/] See Petition at 9-30.

[4/] Comments of the State of Minnesota at 1.

[5/] Comments of Management Systems Council at 2.

[6/] Comments of DOT at 5-6. See also Comments of Saab Systems, Inc. ("Saab") at 1-2 (is involved in marketing and sale of electronic toll collection systems used in connection with ITS); Comments of Minnesota Mining and Manufacturing Company at 2 (is developing Electronic License Plate, whereby transponders on trucks can capture and communicate information regarding vital safety and administrative matters).

of existing ITS applications and the potential benefits of new applications that are being developed.[7/]

IMSA agrees with those comments which support the proposed 5 GHz allocation. In light of the astronomical levels of congestion that now exist on many of our nation's roadways, the importance of ITS applications cannot be overstated. One of the most significant benefits to be gained through the implementation of intelligent transportation systems is a measurable improvement in air quality. As ITS America noted in its Petition, emissions from transportation sources account for 43% of total emissions of nitrogen oxides, 31% of hydrocarbon emissions and 66% of carbon monoxide emissions in the United States.[8/] Thus, by alleviating traffic congestion, intelligent transportation systems can play a crucial role in reducing air pollution.

In fact, Congress expressly has recognized the connection between traffic management systems and improved air quality. Finding that "the growth in the amount and complexity of air pollution brought about by ... the increasing use of motor vehicles,

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[7/] A few commenters have, however, raised concerns about potential interference between DSRC applications at 5 GHz and existing uses of this band. See Comments of Resound Corporation; Comments of the American Radio Relay League, Incorporated; Comments of BellSouth Corporation. IMSA does not believe that such concerns should be permitted to derail the proposed DSRC allocation, as ITS America has pledged to work with incumbent users to address potential interference issues. See Petition at 47-51.

[8/] Petition at 5.

has resulted in mounting dangers to the public health and welfare," Congress enacted the Clean Air Act of 1955 "to encourage and assist the development and operation of regional air pollution prevention and control programs." 42 U.S.C. § 7401. Under the Clean Air Act, areas that fail to meet certain air quality standards must develop and submit an implementation plan containing a "transportation control measures program." 42 U.S.C. §§ 7511a(c)(5) and 7511a(d). This program must consist of (but need not be limited to) specified "transportation control measures," including "traffic flow improvement programs that achieve emission reductions." 42 U.S.C. §§ 7408(f)(1)(A)(v); 7511a(c)(5) and 7511a(d). ITS applications at 5 GHz could be a great asset to state, county and city governments in their efforts to reduce congestion and vehicle emissions to levels that satisfy the requirements of the Clean Air Act..

In view of these potential environmental benefits, the grant of ITS America's Petition also would further the goals of the National Environmental Policy Act of 1969 ("NEPA"). Regulations implementing NEPA direct federal agencies such as the Commission to, among other things, "[u]se all practicable means ... to restore and enhance the quality of the human environment and avoid or minimize any possible adverse effects upon the quality of the human environment." 40 C.F.R. § 1500.2(f). To this end, federal agencies must, for instance, integrate the NEPA process with other planning at the earliest possible time to ensure that their decisions "reflect environmental values." 40 C.F.R. § 1501.2. The Commission's allocation of the requested 5 GHz

spectrum for ITS uses clearly would "reflect environmental values," while providing a host of other important benefits to the millions of people who travel on our nation's roadways.

B. The Existing Allocation at 902-928 MHz Will Not Support the Wide-Ranging DSRC Applications That are Being Developed

ITS America demonstrated in its Petition that existing allocations do not provide sufficient or appropriate spectrum to support the widespread ITS infrastructure that Congress established as a national priority when it enacted the Intermodal Surface Transportation Efficiency Act of 1991.[9/] In particular, the existing allocation in the 902-928 MHz band is too narrow to enable simultaneous deployment of the numerous DSRC-based user services that are envisioned, will not allow for the implementation of nationally interoperable systems and is governed by use and regulatory restrictions that effectively constrict potential DSRC uses.[10/] Similarly, DOT explained in its Comments that "the increasing congestion from ITS and non-ITS services, the limited bandwidth, and the secondary status of DSRC in [the 902-928 MHz] band make this region of

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[9/] Petition at 43-44.

[10/] Id.

spectrum unacceptable for the application of the other envisioned DSRC services, especially those that play a role in public safety."[11/]

Existing ITS services at 902-928 MHz such as electronic toll collection have been deployed successfully in a number of regions, and it is likely that such uses of this spectrum will continue to grow. It is undisputed, however, that this band simply cannot support the wide array of DSRC systems that now are being developed as part of a comprehensive effort to improve safety and reduce congestion and noxious emissions on our roadways. The Commission should seize this opportunity to create an allocation that will facilitate the deployment of such vital communications systems.

III. CONCLUSION

The important public safety and other benefits of emerging DSRC applications cannot be achieved without a spectrum allocation that allows for a wide range of DSRC systems, nationwide interoperability and adequate protection against interference from other spectrum users. After extensive study, ITS America has identified spectrum in the 5 GHz band which is ideally suited to these needs. Accordingly, IMSA strongly urges the Commission to grant ITS America's Petition for Rule Making.

[11/] Comments of DOT at 5. See also Comments of Saab (unlicensed low power systems in the 902-928 MHz band will cause unacceptable interference to DSRC systems).

WHEREFORE, THE PREMISES CONSIDERED, the International Municipal Signal Association respectfully urges the Federal Communications Commission to act in a manner fully consistent with the views expressed herein.

Respectfully submitted,

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